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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,422	08/21/2003	Takao Yamaguchi	MDA-3184US1	8868

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EXAMINER	
PATEL, CHANDRAHAS B	
ART UNIT	PAPER NUMBER
2616	

NOTIFICATION DATE	DELIVERY MODE
07/09/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Office Action Summary	Application No.	Applicant(s)	
	10/645,422	YAMAGUCHI ET AL.	
	Examiner	Art Unit	
	Chandrahas Patel	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 2, 41-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant argues that amended features of claim 1 are not taught by the references. However, examiner disagrees as Peyrovian teaches amended features as discussed below. Newly added claim 43 is also addressed below. Iwata teaches features of newly added claim 43.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sawyer (USPN 5,282,737) in view of Peyrovian et al. (USPN 6,707,800).

Regarding claim 1, Sawyer teaches a data relay processing method **[Abstract]** comprising the steps of, sending pieces of information from a plurality of respective terminals **[Fig. 1, 16]**, including a piece of information on a schedule of usage of a transmission band by the beginning of a term **[Col. 3, line 63 – Col. 4, line 2, the minimum bandwidth needed identifies the min. bandwidth needed for the connection during the communication term]**, another piece of information of a schedule of the transmission band which is available to be assigned **[Col. 3, lines 37-41]**, another piece of information on a schedule of a term where the transmission band is available to be partially assigned **[Col. 3, lines 56-61]**, and holding each respective schedule of each respective terminal; based on the schedule of usage, the schedule of transmission band, the schedule of term, and the necessary communication price partially reserving or partially assigning the transmission band between the respective terminals **[Fig. 1, 40, 42, 46, 44 hold information for each terminal as described in Col. 5, lines 6-28]**.

However, Sawyer does not teach determining available band schedule at the time of the beginning of the term, defining a duration of the term by the beginning of the term; partially assigning and partially exchanging a predetermined amount of the transmission band between the pluralities of respective terminals at the time of the beginning of the term for maximizing the usage efficiency of the entire available transmission band during the term duration based on the schedule of usage of the transmission band and the schedule of the transmission band which is available to be assigned as defined as a band reservation rule.

Peyrovian teaches determining available band schedule at the time of the beginning of the term, defining a duration of the term by the beginning of the term **[Col. 6, lines 35-47, virtual paths are setup in advance and bandwidth is reserved for each channel is advance for corresponding paths belonging to that channel]**; partially assigning and partially exchanging a predetermined amount of the transmission band between the pluralities of respective terminals at the time of the beginning of the term for maximizing the usage efficiency of the entire available transmission band during the term duration based on the schedule of usage of the transmission band and the schedule of the transmission band which is available to be assigned as defined as a band reservation rule **[Col. 6, lines 35-47 and Col. 7, lines 16-25]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to partially assign and exchange the transmission band between pluralities of terminals so that bandwidth capacity can be utilized efficiently **[Col. 7, lines 16-25]**.

4. Claims 2, 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawyer (USPN 5,282,737) in view of Peyrovian et al. (USPN 6,707,800) as applied to claim 1 above, and further in view of Iwata (USPN 5,933,425).

Regarding claim 2, the references teach a method as discussed in rejection of claim 1.

However, the references do not teach based on history information of the past processing record with respect to processes of partially assigning or partially exchanging of the transmission band between respective terminals and based on information with respect to transmission band, the transmission band is partially assigned or partially exchanged.

Iwata teaches based on history information of the past processing record with respect to processes of partially assigning or partially exchanging of the transmission band between respective terminals and based on information with respect to transmission band, the transmission band is partially assigned or partially exchanged **[Col. 5, lines 38-59, Path A-C-D-E is selected where needed transmission band is only 20 Mbps and A-C is at 50 Mbps, D-E and C-D are at 25 Mbps therefore using only 20 Mbps will partially use the bandwidth of links A-C, C-D and D-E]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to assign transmission band based on history information so that specified QOS parameter can be satisfied **[Col. 5, lines 23-29]**.

Regarding claim 41, the references teach a method as discussed in rejection of claim 1.

However, the references do not teach the information sent from each terminal is stored in respective terminals; and the transmission band available to be assigned, defined by the piece of information from one terminal on a schedule of the transmission band which is available to be

assigned, is assigned to or exchanged with an other terminal based on the information stored in respective terminals, thereby connecting the one terminal and the other terminal to a server.

Iwata teaches the information sent from each terminal is stored in respective terminals; and the transmission band available to be assigned, defined by the piece of information from one terminal on a schedule of the transmission band which is available to be assigned, is assigned to or exchanged with an other terminal based on the information stored in respective terminals, thereby connecting the one terminal and the other terminal to a server **[Col. 1, lines 50-65]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to store information in each terminal and assign transmission band based on information stored in the terminal so that user-specified QOS can be met with short connections establishment delay **[Col. 1, lines 43-46]**.

Regarding claim 42, the references teach a method as discussed in rejection of claim 1.

However, the references do not teach the information sent from each terminal is stored in respective terminals; during the term defined by the piece of information from one terminal on a schedule of a term where a transmission band is available to be assigned or exchanged, the transmission band available to be assigned, defined by the piece of information from the one terminal on a schedule of the transmission band which is available to be assigned, is assigned to or exchanged with an other terminal based on the information stored in respective terminals, thereby connecting the one terminal and the other terminal to a server during the term defined by the piece of information of the one terminal on the schedule of the term where the transmission band is available to be assigned or exchanged.

Iwata teaches the information sent from each terminal is stored in respective terminals; during the term defined by the piece of information from one terminal on a schedule of a term where a transmission band is available to be assigned or exchanged, the transmission band available to be assigned, defined by the piece of information from the one terminal on a schedule of the transmission band which is available to be assigned, is assigned to or exchanged with an other terminal based on the information stored in respective terminals, thereby connecting the one terminal and the other terminal to a server during the term defined by the piece of information of the one terminal on the schedule of the term where the transmission band is available to be assigned or exchanged **[Col. 1, lines 50-65]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to store information in each terminal and assign transmission band based on information stored in the terminal so that user-specified QOS can be met with short connections establishment delay **[Col. 1, lines 43-46]**.

Regarding claim 43, the references teach a method as discussed in rejection of claim 1.

However, the references do not teach the step of determining whether or not the partial assignment or the partial exchange of the transmission band should be executed, based on necessary cost for the partial assignment or the partial exchange of the transmission band.

Iwata teaches the step of determining whether or not the partial assignment or the partial exchange of the transmission band should be executed, based on necessary cost for the partial assignment or the partial exchange of the transmission band **[Col. 6, lines 16-32, assigns bandwidth for path if meets cost criteria or selects another path if cost is not met]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine whether or not the partial assignment of transmission band executed based on the cost of the path so that alternative paths can be chosen meeting the necessary cost requirement **[Col. 6, lines 16-32]**.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrahas Patel whose telephone number is (571)270-1211. The examiner can normally be reached on Monday through Thursday 7:30 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit 2616

/Chandrahas Patel/
Examiner, Art Unit 2616